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ASX ANNOUNCEMENT

TICK HILL – COMMENCEMENT OF GRAVITY TEST WORK

Superior Resources Limited (ASX Code: **SPQ**) (**Superior** or **Company**) advises that the Company has commenced a second phase of test work on the Tick Hill Tailings Re-processing Project, which is aimed at investigating the potential for a low operating cost re-processing operation based on a gravity separation circuit.

The gravity separation test work will be conducted on a 50kg bulk sample, sourced from the first phase drilling, which will be passed through a Knelson concentrator to produce a concentrate followed by mercury amalgamation of the concentrate material. Tails from the Knelson concentrator and residue from the mercury amalgamation will be assayed and compared with assays of the concentrate to determine initial recovery results. It is expected that the test work will require up to two weeks to complete with total costs at less than \$5,000.

This second phase of testing follows the recently completed bench top Scoping Study, which examined the metallurgical characteristics of the tailings material and its suitability for re-processing through a conventional CIP/CIL plant. Although the Scoping Study demonstrated that gold recoveries of at least 96 percent are achievable through cyanide leaching, capital and operating costs remained relatively high based on an AUD gold price of \$1,467 per ounce (US\$ 1,100 per ounce @ AUD:USD 0.75).

A gravity separation operation has the potential to drastically reduce the capital and operating costs of a tailings re-processing operation at Tick Hill, when compared with the costs relating to a conventional CIP/CIL operation.

Managing Director, Mr Peter Hwang today said:

“Although we are continuing with our assessment of the conventional cyanide leach processing pathway, given the finite volume of the tailings material and the buoyant Australian dollar gold price, the gravity separation process is a pathway that must be investigated to maximize the potential profitability of any tailings re-processing operation at Tick Hill.”

Background

Exploration focus

Superior’s focus on the Tick Hill Gold Project (**THGP**) is two-fold:

- conduct exploration to identify a faulted extension to the earlier mined high grade mineralised zone, which averaged 22.6 grams per tonne; and
- Surface Gold Project: evaluate and if feasible, exploit “surface gold” surrounding the old mining operation, which will include potential alluvial gold, mine tailings and waste rock dumps.

Whilst the assessment of the mine tailings and the alluvial-colluvial gold are components of the Surface Gold Project, Superior is also commencing preparatory work to enable exploration for the main target, being a potential faulted extension to the earlier lode.



JVA with Diatreme Resources Limited

Under the terms of an Exploration Farm-in and Joint Venture Agreement (**JVA**) with Diatreme Resources Limited (**DRX**), the tailings, alluvial-colluvial gold and all other surface sources of gold are being assessed in joint venture with DRX. The joint venture requires each party to contribute 50% of all costs associated with the operations.

All drilling operations associated with the surface gold assessment program have been conducted with a DRX-owned drill rig. These costs have been shared equally between the parties.

Under the JVA, Superior has the right to earn a 50% interest in the project by spending a minimum of \$750,000 on exploration, which will include substantial drilling over a two year earn-in period (which can be extended by agreement). All expenditure incurred by Superior on the Surface Gold Project will constitute earn-in expenditure and will be counted towards SPQ's \$750,000 minimum earn-in obligation.

During the earn-in period Superior will have the sole and exclusive right to access and conduct exploration on the project as well as to determine the nature of the exploration programs.

Upon a transfer of a 50% interest in the THGP to Superior, Superior will be required to pay DRX \$100,000 and an amount equal to 50% of the government security bond on the mining leases.

Mt Isa Mines Limited retains a royalty on gold produced from the mining leases, which is set at a variable rate depending on the annual grade of gold produced from mining. The royalty applies initially to gold produced above 5g/t Au and then, after payment of royalties totalling \$5M, to gold produced above 10g/t Au. A separate royalty rate applies to gold produced from tailings resulting from previous mining.

Peter Hwang
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